

**AMENDMENTS TO THE CLAIMS**

1. (original) A method of controlling the output voltage of a voltage regulator using a transimpedance block as an amplifier or a comparator, comprising:  
measuring a voltage representative current of said output;  
comparing said voltage representative current to a reference current; and  
stopping a charging process of said voltage regulator when said voltage representative current of said output is substantially the same as said reference current.
2. (original) The method of Claim 1 wherein said reference current is generated by the use of a voltage reference and a voltage to current converter.
3. (Currently Amended) The method of Claim 1 wherein said reference current is generated by the use of a voltage reference and ~~said a~~ reference resistor.
4. (original) The method of Claim 1 wherein the measuring of said output further includes the measurement of a current produced by said output through a resistor.
5. (original) The method of Claim 1 wherein the measuring of said output further includes the measurement of a voltage representative current produced by a resistive divider connected to said output.
6. (original) The method of Claim 1 wherein said voltage regulator uses a transformer to provide said output.
7. (original) The method of Claim 1 wherein said voltage regulator uses an inductive booster to provide said output.
8. (original) The method of Claim 1 wherein said transimpedance block goes into a high impedance state when in a standby mode.

9. (Currently Amended) A voltage regulator used in conjunction with a transimpedance block, said voltage regulator operative to monitor an output voltage ~~on said output~~, said voltage regulator comprising:  
a transimpedance block having a reference input and a sense input, said sense input connected to said output through a resistor, said transimpedance block comparing said sense input voltage representative current to the reference input current, indicating that said output voltage is nominal when said sense input current and said reference input current are in a predetermined relation.
10. (original) The voltage regulator of Claim 9 further wherein sense input is connected to said output through said resistor and a diode.
11. (Currently Amended) A voltage regulator used in conjunction with a transimpedance block, said voltage regulator operative to monitor an output voltage, said voltage regulator comprising:  
a transimpedance block having a reference input and a sense input, said sense input connected to output through a resistive divider, said transimpedance block comparing said sense input voltage representative current to the reference input current, indicating that said output voltage is nominal when said sense input voltage representative current and said reference input current are in a predetermined relation.